

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A computer-implemented method for selectively
2 auditing accesses to a relational database, comprising:
3 receiving a query for the relational database;
4 selectively auditing an access to the relational database,
5 wherein selectively auditing the access involves
6 automatically modifying the query prior to processing the query,
7 wherein ~~the~~ an auditing condition for the selective auditing
8 specifies a condition based on a value of a field in a row in the
9 relational database, and
10 wherein satisfying the auditing condition allows selective
11 auditing of the query,
12 processing the modified query to produce a query result, wherein processing
13 the modified query includes:
14 creating ~~the auditing~~ audit records only for rows in relational
15 tables accessed by the query and that satisfy the auditing condition,
16 and
17 recording the audit ~~record~~ records in an audit record store;
18 and
19 returning the query result;

20 wherein if the query modifies at least one entry in the relational database,
21 using a relational database system trigger to create and record the audit record for
22 the modification to the relational database.

1 2 (Canceled).

1 3. (Previously presented) The method of claim 1, further comprising
2 ensuring the case statement is evaluated near the end of the query processing so the
3 case statement is evaluated only after other conditions of the query are satisfied.

1 4-6 (Canceled).

1 7. (Original) The method of claim 1, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 8. (Original) The method of claim 1, wherein the auditing condition
2 includes a condition for a field within the relational database.

1 9. (Currently amended) A computer-readable storage medium storing
2 instructions to be executed by a computer causing the computer to perform a
3 method for selectively auditing accesses to a relational database, the method
4 comprising:
5 receiving a query for the relational database;
6 selectively auditing an access to the relational database,
7 wherein selectively auditing the access involves
8 automatically modifying the query prior to processing the query,
9 wherein ~~the~~ an auditing condition for the selective auditing
10 specifies a condition based on a value of a field in a row in the

11 relational database, and
12 wherein satisfying the auditing condition allows selective
13 auditing of the query,
14 processing the modified query to produce a query result, wherein processing
15 the modified query includes:
16 | creating ~~the auditing~~audit records only for rows in relational
17 | tables accessed by the query and that satisfy the auditing condition,
18 | and
19 | recording the audit ~~record~~records in an audit record store;
20 | and
21 returning the query result;
22 wherein if the query modifies at least one entry in the relational database,
23 the method further comprises using a relational database system trigger to create
24 and record the audit record for the modification to the relational database.

1 10 (Canceled).

1 11. (Previously presented) The computer-readable storage medium of claim
2 9, wherein the method further comprises ensuring the case statement is evaluated
3 near the end of the query processing so the case statement is evaluated only after
4 other conditions of the query are satisfied.

1 12. (Original) The computer-readable storage medium of claim 9, wherein
2 the method further comprises retrieving the auditing condition for a given table
3 from a data structure associated with the given table.

1 13-14 (Canceled).

1 15. (Original) The computer-readable storage medium of claim 9, wherein
2 the audit record includes:

3 a user name for a user making the query;
4 a time stamp specifying a time of the query; and
5 a text of the query.

1 16. (Original) The computer-readable storage medium of claim 9, wherein
2 the auditing condition includes a condition for a field within the relational database.

1 17. (Currently amended) An apparatus for selectively auditing accesses to a
2 relational database, comprising:

3 a receiving mechanism configured to receive a query for the relational
4 database;

5 a selective auditing mechanism configured to selectively audit an access to
6 the relational database,

7 wherein selectively auditing the access involves
8 automatically modifying the query prior to processing the query,
9 wherein ~~the~~ an auditing condition for the selective auditing
10 specifies a condition based on a value of a field in a row in the
11 relational database, and

12 wherein satisfying the auditing condition allows selective
13 auditing of the query,

14 a query processor configured to process the modified query to produce a
15 query result, wherein processing the modified query includes:

16 creating ~~the auditing~~ audit records only for rows in relational
17 tables accessed by the query and that satisfy the auditing condition,

18 and

19 recording the audit ~~record~~ records in an audit record store;

20 and

21 a returning mechanism configured to return the query result;

22 wherein if the query modifies at least one entry in the relational database,
23 the apparatus uses a relational database system trigger to create and record the audit
24 record for the modification to the relational database.

1 18 (Canceled).

1 19. (Previously presented) The apparatus of claim 17, wherein the query
2 modification mechanism is configured to ensure the case statement is evaluated
3 near the end of the query processing so the case statement is evaluated only after
4 other conditions of the query are satisfied.

1 20. (Original) The apparatus of claim 17, wherein the query modification
2 mechanism is configured to retrieve the auditing condition for a given table from a
3 data structure associated with the given table.

1 21-22 (Canceled).

1 23. (Original) The apparatus of claim 17, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 24. (Original) The apparatus of claim 17, wherein the auditing condition
2 includes a condition for a field within the relational database.

1 25. (Previously presented) The method of claim 1, further comprising
2 retrieving the auditing condition for a given table from a data structure associated
3 with the given table.

1 26. (Currently amended) A computer-implemented method for selectively

2 auditing accesses to a relational database, comprising:
3 receiving a database operation for the relational database;
4 selectively auditing an access to the relational database based on an
5 auditing condition, wherein the auditing condition for the selective auditing
6 specifies a condition based on a value of a field in a row in the relational database;
7 processing the database operation to produce a database operation result,
8 wherein processing the database operation includes:
9 creating ~~the auditing~~audit records only for selected rows in
10 the relational database that are accessed by the database operation
11 and that satisfy the auditing condition, and
12 recording the audit ~~record~~records in an audit record store;
13 and
14 returning the database operation result;
15 wherein selectively auditing the access involves automatically modifying
16 the database operation prior to processing the database operation,
17 wherein satisfying the auditing condition allows selective auditing of the
18 database operation and not for other rows;
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation; and
21 wherein if the database operation modifies at least one entry in the
22 relational database, using a relational database system trigger to create and record
23 the audit record for the modification to the relational database.

1 27 (Canceled).

1 28. (Previously presented) The method of claim 26, wherein the auditing
2 condition includes a condition for at least two fields within the relational database.

1 29. (Currently amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method for selectively auditing accesses to a relational database, the method
4 comprising:
5 receiving a database operation for the relational database;
6 selectively auditing an access to the relational database based on an
7 auditing condition, wherein the auditing condition for the selective auditing
8 specifies a condition based on a value of a field in a row in the relational database;
9 processing the database operation to produce a database operation result,
10 wherein processing the database operation includes:
11 creating ~~the auditing~~ audit records only for selected rows in
12 the relational database that are accessed by the database operation
13 and that satisfy the auditing condition, and
14 recording the audit ~~record~~ records in an audit record store;
15 and
16 returning the database operation result;
17 wherein selectively auditing the access involves automatically modifying
18 the database operation prior to processing the database operation,
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation and not for other rows;
21 wherein satisfying the auditing condition allows selective auditing of the
22 database operation; and
23 wherein if the database operation modifies at least one entry in the
24 relational database, using a relational database system trigger to create and record
25 the audit record for the modification to the relational database.

1 30 (Canceled).

1 31. (Previously presented) The computer-readable storage medium of
2 claim 29, wherein the auditing condition includes a condition for at least two
3 fields within the relational database.

1 32. (Currently amended) An apparatus for selectively auditing accesses to
2 a relational database, comprising:
3 a receiving mechanism configured to receive a database operation for the
4 relational database;
5 a selective auditing mechanism configured to selectively audit an access to
6 the relational database based on an auditing condition, wherein the auditing
7 condition for the selective auditing specifies a condition based on a value of a
8 field in a row in the relational database;
9 a processing mechanism configured to process the database operation to
10 produce a database operation result;
11 a creating mechanism configured to create ~~the auditing~~ audit records only
12 for selected rows in the relational database that are accessed by the database
13 operation and that satisfy the auditing condition, and
14 a recording mechanism configured to record the audit ~~record~~ records in an
15 audit record store; and
16 a returning mechanism configured to return the database operation result;
17 wherein selectively auditing the access involves automatically modifying
18 the database operation prior to processing the database operation,
19 wherein satisfying the auditing condition allows selective auditing of the
20 database operation and not for other rows;
21 wherein satisfying the auditing condition allows selective auditing of the
22 database operation; and

23 wherein if the database operation modifies at least one entry in the
24 relational database, the apparatus uses a relational database system trigger to
25 create and record the audit record for the modification to the relational database.

1 33 (Canceled).

1 34. (Previously presented) The apparatus of claim 32, wherein the auditing
2 condition includes a condition for at least two fields within the relational database.